

**Supplementary Table S1: Australian terrestrial mammal species assessed as more susceptible to predation from savannah cats than domestic cats.**

We assume that any mammal species assessed as at risk of predation by the domestic cat will be at least as susceptible to predation by the savannah cat (SC). Only those mammal species assessed as more susceptible to predation by savannah cats than by domestic cats are listed here. The full list of all mammal species assessed is provided in Table S1 of Radford et al. 2018 [53]. Female body weight data are mostly from Van Dyck and Strahan 2008 [62], with data on species described since 2008 obtained from the primary sources.

Species	Common Name	Female Body Weight (g)	Conservation Status (IUCN) [46]	Susceptibility to Domestic Cat Predation *	Susceptibility to Savannah Cat Predation	Reason for Change
<i>Ornithorhynchus anatinus</i>	Platypus	600–1700	NT	Not susceptible	High	Occupies riparian areas, dense vegetation
<i>Zaglossus bruijnii</i>	Western long-beaked echidna	~5000	CR	Not susceptible	Low	Weight range places it at high potential susceptibility to SC predation, but spines provide some protection
<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	900–2500	NT	Low	High	Partly arboreal, occupies dense wet forests
<i>Sarcophilus harrisii</i>	Tasmanian devil	5000–9000	EN	Not susceptible	Low	Weight range places it at high potential susceptibility to SC predation, but pugnacious behaviour reduces risk to low
<i>Antechinus adustus</i>	Rusty antechinus	18–35	LC	Not susceptible	Low	Occupies rainforest, some activity high above ground
<i>Antechinus godmani</i>	Atherton antechinus	42–78	NT	Not susceptible	Low	Occupies rainforest, some activity high above ground
<i>Antechinus leo</i>	Cinnamon antechinus	32–74	LC	Not susceptible	Low	Occupies rainforest, some activity high above ground
<i>Antechinus mysticus</i>	Buff-footed antechinus	18–34	LC	Not susceptible	Low	Occupies rainforest, some activity likely to be high above ground
<i>Antechinus subtropicus</i>	Subtropical antechinus	16–32	LC	Not susceptible	Low	Occupies rainforest, some activity high above ground
<i>Myrmecobius fasciatus</i>	Numbat	305–647	EN	Low	High	Weight range places it at high potential susceptibility to SC predation
<i>Echymipera rufescens</i>	Long-nosed echymipera	300–1200	LC	Low	High	Occupies rainforest, weight range places it at high potential susceptibility to SC predation
<i>Isoodon macrourus</i>	Northern brown bandicoot	500–1700	LC	Low	High	Often occupies dense vegetation, weight range places it at high potential susceptibility to SC predation
<i>Isoodon obesulus</i>	Southern brown bandicoot	400–1200	NT	Low	High	Often occupies dense vegetation, weight range

						places it at high potential susceptibility to SC predation
<i>Isoodon fusciventer</i>	Quenda	400–1100	LC	Low	High	Often occupies dense vegetation, weight range places it at high potential susceptibility to SC predation
<i>Isoodon peninsulae</i>	Cape York brown bandicoot	350–1050	LC	Low	High	Often occupies dense vegetation, weight range places it at high potential susceptibility to SC predation
<i>Perameles pallescens</i>	Northern long-nosed bandicoot	350–950	LC	Low	High	Often occupies dense vegetation, weight range places it at high potential susceptibility to SC predation
<i>Phascolarctos cinereus</i>	Koala	7000–11,000	VU	Not susceptible	Low	Weight range places it at some risk to SC predation, mostly active high above ground
<i>Dactylopsila trivirgata</i>	Striped possum	310–475	LC	Low	High	Occupies rainforest, often active near ground
<i>Petaurus gracilis</i>	Mahogany glider	310–454	EN	Not susceptible	Low	Usually active > 4 m above ground
<i>Petropseudes dahli</i>	Rock ringtail possum	1280–2000	LC	Low	High	Much activity in trees < 4 m above ground
<i>Trichosurus caninus</i>	Short-eared brushtail possum	2500–4500	LC	Low	High	Often active on ground in dense forest, weight range places it at high potential susceptibility to SC predation
<i>Trichosurus cunninghami</i>	Mountain brushtail possum	2600–4200	LC	Low	High	Often active on ground in dense forest, weight range places it at high potential susceptibility to SC predation
<i>Trichosurus vulpecula</i>	Common brushtail possum	1200–3500	LC	Low	High	Often active on ground in dense forest, weight range places it at high potential susceptibility to SC predation
<i>Wyulda squamicaudata</i>	Scaly-tailed possum	900–2000	NT	Low	High	Much activity in trees < 4 m above ground
<i>Hypsiprymmodon moschatus</i>	Musky rat-kangaroo	453–635	LC	Low	High	Occupies rainforest, weight range places it at high potential susceptibility to SC predation
<i>Aepyprymnus rufescens</i>	Rufous bettong	1300–3000	LC	Low	High	Part of range overlaps dense forest, weight range places it at high potential susceptibility to SC predation
<i>Bettongia gaimardi</i>	Eastern bettong	1200–2250	NT	Low	High	Part of range overlaps dense forest, weight range places it at high potential susceptibility to SC predation
<i>Dendrolagus bennettianus</i>	Bennett's tree-kangaroo	6300–10,600	NT	Not susceptible	Low	Occupies rainforest, mostly active > 4 m above ground

<i>Dendrolagus lumholtzi</i>	Lumholtz's tree-kangaroo	5100–7750	NT	Not susceptible	Low	Occupies rainforest, mostly active > 4 m above ground
<i>Lagorchestes conspicillatus</i>	Spectacled hare-wallaby	1600–4750	LC	Low	High	Weight range places it at high potential susceptibility to SC predation
<i>Notamacropus agilis</i>	Agile wallaby	9000–15,000	LC	Not susceptible	Low	Weight range places it at low potential susceptibility to SC predation
<i>Notamacropus dorsalis</i>	Black-striped wallaby	5200–7600	LC	Not susceptible	High	Weight range places it at high potential susceptibility to SC predation
<i>Notamacropus eugenii</i>	Tammar wallaby	4000–6000	LC	Low	High	Weight range places it at high potential susceptibility to SC predation
<i>Notamacropus irma</i>	Western brush wallaby	7000–9000	LC	Low	High	Weight range places it at intermediate potential susceptibility to SC predation, high risk associated with occupation of wet flats and thickets
<i>Notamacropus parma</i>	Parma wallaby	3200–4800	NT	Not susceptible	High	Weight range places it at high potential susceptibility to SC predation
<i>Notamacropus parryi</i>	Whiptail wallaby	7000–15,000	LC	Not susceptible	Low	Weight range places it mostly at low potential susceptibility to SC predation
<i>Notamacropus rufogriseus</i>	Red-necked wallaby	11,000–15,500	LC	Not susceptible	Low	Weight range places it at low potential susceptibility to SC predation
<i>Osphranter bernardus</i>	Black wallaroo	13,000	NT	Not susceptible	Low	Weight range places it at low potential susceptibility to SC predation
<i>Onychogalea fraenata</i>	Bridled nailtail wallaby	4000–6000	EN	Low	High	Weight range places it at high potential susceptibility to SC predation
<i>Onychogalea unguifera</i>	Northern nailtail wallaby	4500–7000	LC	Low	High	Weight range places it at high potential susceptibility to SC predation
<i>Petrogale herberti</i>	Herbert's rock-wallaby	3700–4900	LC	Not susceptible	Low	Weight range places it at high potential susceptibility to SC predation, but its rock outcrop habitat likely reduces risk to low
<i>Petrogale inornata</i>	Unadorned rock-wallaby	3100–5000	LC	Not susceptible	Low	Weight range places it at high potential susceptibility to SC predation, but its rock outcrop habitat likely reduces risk to low
<i>Petrogale</i>	Proserpine rock-	3500–8100	EN	Not	Low	Weight range places it

<i>persephone</i>	wallaby			susceptible			at high potential susceptibility to SC predation, but its rock outcrop habitat likely reduces risk to low
<i>Petrogale purpureicollis</i>	Purple-necked rock-wallaby	2700–5700	NT	Not susceptible	Low		Weight range places it at high potential susceptibility to SC predation, but its rock outcrop habitat likely reduces risk to low
<i>Thylogale billardieri</i>	Tasmanian pademelon	2400–10,000	LC	Low	High		Occupies rainforest / wet forest with dense understorey, weight range places it mostly at high potential susceptibility to SC predation
<i>Thylogale stigmatica</i>	Red-legged pademelon	2500–4200	LC	Low	High		Occupies rainforest / wet forest with dense understorey, weight range places it at high potential susceptibility to SC predation
<i>Thylogale thetis</i>	Red-necked pademelon	1800–4300	LC	Low	High		Occupies rainforest / wet forest with dense understorey, weight range places it at high potential susceptibility to SC predation
<i>Setonix brachyurus</i>	Quokka	1600–3500	VU	Low	High		Mostly confined on mainland to dense vegetation in high rainfall areas, weight range places it at high potential susceptibility to SC predation
<i>Wallabia bicolor</i>	Swamp wallaby	10,300–15,400	LC	Not susceptible	Low		Weight range places it at low potential susceptibility to SC predation
<i>Mastacomys fuscus</i>	Broad-toothed rat	97–145	NT	Low	High		Occupies dense wet, often riparian habitats
<i>Pseudomys nanus</i>	Western chestnut mouse	18–56	LC	Low	High		Occupies varied habitats with dense understorey
<i>Hydromys chrysogaster</i>	Water-rat	340 – 992	LC	Low	High		Occupies riparian areas, often with dense vegetation
<i>Xeromys myoides</i>	Water mouse	32–64	VU	Low	High		Occupies coastal and riparian areas, often with dense vegetation
<i>Melomys burtoni</i>	Grassland melomys	26–97	LC	Low	High		Occupies dense vegetation in high rainfall coastal areas, much activity < 4 m above ground
<i>Melomys capensis</i>	Cape York melomys	45–96	LC	Not susceptible	High		Occupies rainforest and other wet forest, much activity < 4 m above ground
<i>Melomys cervinipes</i>	Fawn-footed melomys	45–120	LC	Not susceptible	High		Occupies dense vegetation in high rainfall coastal areas,

						much activity < 4 m above ground
<i>Uromys caudimaculatus</i>	Giant white-tailed rat	500–800	LC	Not susceptible	High	Occupies rainforest and other wet forest, much activity < 4 m above ground
<i>Uromys hadrourus</i>	Pygmy white-tailed rat	152–220	NT	Not susceptible	High	Occupies rainforest, much activity likely to be < 4 m above ground
<i>Pogonomys sp.</i>	Tree mouse	40–79	LC	Not susceptible	Low	Occupies rainforest, much activity likely to be > 4 m above ground
<i>Rattus leucopus</i>	Cape York rat	95–207	LC	Not susceptible	Low	Occupies rainforest, but much activity in logs, under litter or in burrows may reduce potential susceptibility to SC predation from high to low
<i>Rattus tunneyi</i>	Pale field-rat	42–85	LC	Low	High	Occupies tall grassland, usually near watercourses

\* Radford et al. 2018 [53] assessed predator susceptibility to both the domestic cat and red fox together. We used evidence based on the relative impacts of foxes and cats in [53] to identify the susceptibility of each mammal species to domestic cat predation alone. For example, if a species was assessed as highly susceptible to predation by cats and foxes in [53], with the impact of foxes rated as being stronger than that of cats (cat < fox), we conservatively rated the susceptibility of that species to cats alone as low. If a species was assessed as being of high or low susceptibility to predation by cats and foxes in [53], with the impact of foxes being equal to that of cats (cat = fox), the susceptibility of that species to cats alone remained unchanged. IUCN conservation status: LC = Least Concern, NT = Near Threatened, VU = Vulnerable, EN = Endangered, CR = Critically Endangered.

## References

62. Van Dyck, S.; Strahan, R. *The Mammals of Australia*, 4th edition; Reed New Holland: Sydney, Australia, 2008.